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FILE 'HOME' ENTERED AT 14:45:00 ON 28 MAR 2005
=> file biosis medline caplus wpids uspatfull
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                                                                SESSION
FULL ESTIMATED COST
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                                                                  0.21
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FILE 'USPATFULL' ENTERED AT 14:45:22 ON 28 MAR 2005
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*** YOU HAVE NEW MAIL ***
=> s method (4a) separat? (5a) nucleic acid?
   3 FILES SEARCHED...
           714 METHOD (4A) SEPARAT? (5A) NUCLEIC ACID?
=> s l1 and metal oxide
            28 L1 AND METAL OXIDE
=> s 12 and chaotrop?
           17 L2 AND CHAOTROP?
=> s 13 and detergent
            10 L3 AND DETERGENT
=> s 14 and amplification
             8 L4 AND AMPLIFICATION
L5
=> dup rem 15
PROCESSING COMPLETED FOR L5
              8 DUP REM L5 (0 DUPLICATES REMOVED)
=> d 16 bib abs 1-8
    ANSWER 1 OF 8 USPATFULL on STN
1.6
       2005:62905 USPATFULL
AN
ΤI
       Extraction of nucleic acid
IN
       Baker, Matthew, Maidstone, UNITED KINGDOM
       Taylor, Matthew, Carterbury, UNITED KINGDOM
       Uppal, Shilpa, Canterbury, UNITED KINGDOM
PΙ
       US 2005053941
                       A1 20050310
ΑT
       US 2004-496449
                        A1
                               20041101 (10)
       WO 2002-GB5209
                               20021120
PRAI
       GB 2001-27809
                          20011120
      Utility
DT
FS
       APPLICATION
LREP
       DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400,
       PHILADELPHIA, PA, 19103-2307
CLMN
       Number of Claims: 43
```

Methods of obtaining a sample of target nucleic acid from cells

containing the target nucleic acid and genomic DNA or RNA are disclosed.

ECL

DRWN

AΒ

LN.CNT 550

Exemplary Claim: 1

2 Drawing Page(s)

In contrast to prior art protocols, this method does not require the cells containing the target nucleic acid to be lysed and instead is based on the observation when cells are suspended in an aqueous medium and the target nucleic acid are released into the medium through the cell walls. The invention therefore helps to avoid the use of cell lysis, heating, extremes of pH, water immiscible solvents, and electrical fields used in prior art nucleic acid extraction methods. The present invention is particularly applicable to the separation of non-genomic nucleic acid, such as cellular vector DNA or RNA, self-replicating satellite nucleic acids or plasmid DNA, from genomic nucleic acids, such as host cell chromosomes and ribosomal RNA.

```
L6
     ANSWER 2 OF 8 USPATFULL on STN
AN
       2004:203333 USPATFULL
ΤI
       Chemical treatment of biological samples for nucleic acid extraction and
       Lou, Jianrong, Mount Airy, MD, UNITED STATES
IN
       Collis, Matthew P., Seven Valleys, PA, UNITED STATES
       Fort, Thomas L., Finksburg, MD, UNITED STATES
PΙ
       US 2004157223
                          Α1
                               20040812
       US 2003-419935
ΑI
                          Α1
                               20030422 (10)
       Continuation-in-part of Ser. No. US 2003-359180, filed on 6 Feb 2003,
RLI
       PENDING
DT
       Utility
FS
       APPLICATION
LREP
       PATTON BOGGS LLP, 8484 WESTPARK DRIVE, SUITE 900, MCLEAN, VA, 22102
CLMN
       Number of Claims: 37
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 714
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       A composition and method for the purification of nucleic acid are
       disclosed. The composition includes at least one alkaline agent and at
       least one detergent. The composition preferably also includes
       a suspension of paramagnetic particles and an acidic solution. The
       method involves the use of the composition with paramagnetic particles
       to extract nucleic acid from a biological sample.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 3 OF 8 USPATFULL on STN
L6
       2004:203330 USPATFULL
AN
       Chemical treatment of biological samples for nucleic acid extraction and
ΤI
       kits therefor
IN
       Lou, Jianrong, Mount Airy, MD, UNITED STATES
       Collis, Matthew P., Seven Valleys, PA, UNITED STATES
       Fort, Thomas L., Finksburg, MD, UNITED STATES
PΤ
       US 2004157219
                       A1
                               20040812
ΑI
       US 2003-359180
                          A1
                               20030206 (10)
DT
       Utility
FS
       APPLICATION
LREP
       Laura D. Nammo, Patton Boggs LLP, 9th Floor, 8484 Westpark Drive,
       McLean, VA, 22102
CLMN
       Number of Claims: 33
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A composition and method for the purification of nucleic acid are
       disclosed. The composition includes at least one alkaline agent and at
       least one detergent. The composition preferably also includes
       a suspension of paramagnetic particles and an acidic solution. The
       method involves the use of the composition with paramagnetic particles
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

to extract nucleic acid from a biological sample.

```
L6
     ANSWER 4 OF 8
                   USPATFULL on STN
AN
       '2003:258639 USPATFULL
       207 human secreted proteins
Τŀ
IN
       Ni, Jian, Germantown, MD, UNITED STATES
       Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
       LaFleur, David W., Washington, DC, UNITED STATES
       Moore, Paul A., Germantown, MD, UNITED STATES
       Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Ruben, Steven M., Olney, MD, UNITED STATES
       Soppet, Daniel R., Centreville, VA, UNITED STATES
       Young, Paul E., Gaithersburg, MD, UNITED STATES
       Shi, Yanggu, Gaithersburg, MD, UNITED STATES
       Florence, Kimberly A., Rockville, MD, UNITED STATES
       Wei, Ying-Fei, Berkeley, CA, UNITED STATES
       Florence, Charles, Rockville, MD, UNITED STATES
       Hu, Jing-Shan, Mountain View, CA, UNITED STATES
       Li, Yi, Sunnyvale, CA, UNITED STATES
       Kyaw, Hla, Frederick, MD, UNITED STATES
       Fischer, Carrie L., Burke, VA, UNITED STATES
       Ferrie, Ann M., Painted Post, NY, UNITED STATES
       Fan, Ping, Potomac, MD, UNITED STATES
       Feng, Ping, Gaithersburg, MD, UNITED STATES
       Endress, Gregory A., Florence, MA, UNITED STATES
       Dillon, Patrick J., Carlsbad, CA, UNITED STATES
       Carter, Kenneth C., North Potomac, MD, UNITED STATES
       Brewer, Laurie A., St. Paul, MN, UNITED STATES
       Yu, Guo-Liang, Berkeley, CA, UNITED STATES
       Zeng, Zhizhen, Lansdale, PA, UNITED STATES
       Greene, John M., Gaithersburg, MD, UNITED STATES
PΙ
       US 2003181692
                          Α1
                               20030925
AΙ
       US 2001-933767
                          Α1
                                20010822 (9)
RLI
       Continuation-in-part of Ser. No. WO 2001-US5614, filed on 21 Feb 2001,
       PENDING Continuation-in-part of Ser. No. US 1998-205258, filed on 4 Dec
       1998, PENDING
PRAI
       US 2000-184836P
                           20000224 (60)
       US 2000-193170P
                           20000329 (60)
       US 1997-48885P
                           19970606 (60)
       US 1997-49375P
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       US 1997-48897P
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US 1997-48898P
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                           19970606 (60)
       US 1997-48963P
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                           19970606 (60)
       US 1997-48878P
                           19970606 (60)
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                           19970905 (60)
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                           19970905 (60)
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                           19970905 (60)
       US 1997-57629P
                           19970905 (60)
       US 1997-57628P
                           19970905 (60)
       US 1997-57777P
                           19970905 (60)
       US 1997-57634P
                           19970905 (60)
       US 1997-70923P
                           19971218 (60)
       US 1998-92921P
                           19980715 (60)
                           19980730 (60)
       US 1998-94657P
       US 1997-70923P
                           19971218 (60)
       US 1998-92921P
                           19980715 (60)
       US 1998-94657P
                           19980730 (60)
       Utility
       APPLICATION
       HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
       Number of Claims: 23
       Exemplary Claim: 1
       10 Drawing Page(s)
LN.CNT 32746
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to novel human secreted proteins and
       isolated nucleic acids containing the coding regions of the genes
       encoding such proteins. Also provided are vectors, host cells,
       antibodies, and recombinant methods for producing human secreted
       proteins. The invention further relates to diagnostic and therapeutic
       methods useful for diagnosing and treating diseases, disorders, and/or
       conditions related to these novel human secreted proteins.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 8 USPATFULL on STN ΑN 2003:78475 USPATFULL TIIsolation of nucleic acids

DT

FS

LREP

CLMN

DRWN

ECL

AB

```
IN
       Baker, Matthew John, Maidstone, UNITED KINGDOM
PΙ
      US 2003054395
                          A1
                               20030320
ΑI·
       US 2002-232971
                          A1
                               20020830 (10)
       Division of Ser. No. US 2000-736632, filed on 14 Dec 2000, PENDING
RLI
       Continuation-in-part of Ser. No. US 2000-586009, filed on 2 Jun 2000,
       PENDING Continuation of Ser. No. WO 1998-GB3602, filed on 4 Dec 1998,
       UNKNOWN
PRAI
       GB 1997-25839
                           19971206
                           19980717
       GB 1998-15541
DT
       Utility
FS
       APPLICATION
       DANN DORFMAN HERRELL & SKILLMAN, SUITE 720, 1601 MARKET STREET,
LREP
       PHILADELPHIA, PA, 19103-2307
       Number of Claims: 41
CLMN
       Exemplary Claim: 1
ECL
DRWN
      No Drawings
LN.CNT 1208
CAS'INDEXING IS AVAILABLE FOR THIS PATENT.
       A method for extracting nucleic acids from a biological material such as
       blood comprises contacting the mixture with a material at a pH such that
       the material is positively charged and will bind negatively charged
       nucleic acids and then eluting the nucleic acids at a pH when the said
       materials possess a neutral or negative charge to release the nucleic
       acids The nucleic acids can be removed under mildly alkaline conditions
       to the maintain integrity of the nucleic acids and to allow retrieval of
       the nucleic acids in reagents that are immediately compatible with
       either storage or analytical testing.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L6
     ANSWER 6 OF 8 USPATFULL on STN
AN
       2003:10625 USPATFULL
ΤI
       Isolation of nucleic acids
       Baker, Matthew John, Maidstone, UNITED KINGDOM
ΤN
                         A1
PΙ
       US 2003008320
                               20030109
AΙ
       US 2002-232135
                         A1
                               20020829 (10)
RLI
       Division of Ser. No. US 2000-736632, filed on 14 Dec 2000, PENDING
       Continuation-in-part of Ser. No. US 2000-586009, filed on 2 Jun 2000,
       PENDING Continuation of Ser. No. WO 1998-GB3602, filed on 4 Dec 1998,
       UNKNOWN
PRAI
       GB 1997-25839
                           19971206
       GB 1998-15541
                           19980717
DT
       Utility
FS
       APPLICATION
       DANN DORFMAN HERRELL & SKILLMAN, SUITE 720, 1601 MARKET STREET,
LREP
       PHILADELPHIA, PA, 19103-2307
CLMN
       Number of Claims: 41
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1208
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method for extracting nucleic acids from a biological material such as
       blood comprises contacting the mixture with a material at a pH such that
       the material is positively charged and will bind negatively charged
       nucleic acids and then eluting the nucleic acids at a pH when the said
       materials possess a neutral or negative charge to release the nucleic
       acids. The nucleic acids can be removed under mildly alkaline conditions
       to the maintain integrity of the nucleic acids and to allow retrieval of
       the nucleic acids in reagents that are immediately compatible with
       either storage or analytical testing.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 7 OF 8 USPATFULL on STN

Nucleic acid isolation method & kit

A1

Gundling, Gerard, Lake Forest, IL, UNITED STATES

20020606

2002:133962 USPATFULL

US 2002068821

L6

AN

TI

IN PI

US 1999-470944 AΙ A1 19991222 (9) DT Utility FS APPLICATION LREP ABBOTT LABORATORIES, DEPT. 377 - AP6D-2, 100 ABBOTT PARK ROAD, ABBOTT PARK, IL, 60064-6050 CLMN Number of Claims: 11 ECL Exemplary Claim: 1 2 Drawing Page(s) DRWN LN.CNT 930 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Provided herein is a method for separating nucleic acid from a test sample comprising the steps of contacting a test sample with a metal oxide support material and a binding buffer to form nucleic acid/metal oxide support material complexes, separating the complexes from the test sample; and eluting the nucleic acid from the metal oxide support material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1.6 ANSWER 8 OF 8 USPATFULL on STN AN2001:145374 USPATFULL TIIsolation of nucleic acids IN Baker, Matthew John, Maldstone, Great Britain **A**1 PI · US 2001018513 20010830 US 2000-736632 ΑI Α1 20001214 (9) Continuation-in-part of Ser. No. US 2000-586009, filed on 2 Jun 2000, RLI PENDING A 371 of International Ser. No. WO 1998-GB3602, filed on 4 Dec 1998, UNKNOWN PRAI GB 1997-25839 19971206 GB 1998-15541 19980717 Utility DT FS APPLICATION DANN DORFMAN HERRELL & SKILLMAN, SUITE 720, 1601 MARKET STREET, LREP PHILADELPHIA, PA, 19103-2307 CLMN Number of Claims: 41 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 1208 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for extracting nucleic acids from a biological material such as blood comprises contacting the mixture with a material at a pH such that the material is positively charged and will bind negatively charged nucleic acids and then eluting the nucleic acids at a pH when the said materials possess a neutral or negative charge to release the nucleic acids. The nucleic acids can be removed under mildly alkaline conditions to the maintain integrity of the nucleic acids and to allow retrieval of the nucleic acids in reagents that are immediately compatible with either storage or analytical testing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L13 ANSWER 1 OF 11 USPATFULL on STN
AN
       2004:158537 USPATFULL
ΤI
       Method for generating multiple samples containing a predetermined amount
       of nucleic acid
TN
       Greenfield, I Lawrence, San Mateo, CA, UNITED STATES
       Bost, Douglas A., San Mateo, CA, UNITED STATES
PΙ
       US 2004121336
                          A1
                               20040624
       US 2002-325588
                          Α1
                               20021220 (10)
ΑI
DT
       Utility
FS
       APPLICATION
LREP
       SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A., P.O. BOX 2938, MINNEAPOLIS,
       MN, 55402
CLMN
       Number of Claims: 54
       Exemplary Claim: 1
ECL
DRWN
       20 Drawing Page(s)
LN.CNT 1817
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method is provided for binding a predetermined amount of a nucleic
       acid. The method involves contacting one or more sample solutions
       comprising a nucleic acid with a multiplicity of solid substrate
       binding units, where the solid substrate binding units bind
       the nucleic acid. Each binding unit has a predetermined binding capacity
       for the nucleic acid. An apparatus for binding one or more predetermined
       amounts of a nucleic acid is also provided.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 2 OF 11 USPATFULL on STN
       2004:120515 USPATFULL
ΑN
ΤI
       Nucleic acid archiving
       Gerdes, John C., Denver, CO, UNITED STATES
ΙN
       Marmaro, Jeffery M., Aurora, CO, UNITED STATES
       Ives, Jeffrey T., Arvada, CO, UNITED STATES
       Roehl, Christopher A., Tampa, FL, UNITED STATES
PΙ
       US 2004091925
                         A1
                               20040513
ΑT
       US 2003-690359
                         A1
                               20031021 (10)
RLI
       Division of Ser. No. US 2001-944604, filed on 31 Aug 2001, PENDING
       Continuation-in-part of Ser. No. US 1998-61757, filed on 16 Apr 1998,
       GRANTED, Pat. No. US 6291166
PRAI
       US 1997-41999P
                         19970416 (60)
DT
       Utility
FS
       APPLICATION
LREP
       HOGAN & HARTSON LLP, ONE TABOR CENTER, SUITE 1500, 1200 SEVENTEENTH ST,
       DENVER, CO, 80202
CLMN
       Number of Claims: 9
ECL
       Exemplary Claim: 1
       21 Drawing Page(s)
DRWN
LN.CNT 1630
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       This invention provides a kit comprising a substrate having a
       surface coated with a solid phase matrix for nucleic acid
       manipulation. The solid phase matrix exhibits sufficient hydrophilicity
       and electropositivity to tightly bind the nucleic acids in a sample. The
       manipulations include nucleic acid (double or single stranded DNA and
       RNA) capture from high volume and/or low concentration specimens, buffer
       changes, washes, and volume reductions, and enable the interface of
       solid phase bound nucleic acid with enzyme, hybridization or
       amplification strategies. The tightly bound nucleic acid may be
       used, for example, in repeated analyses to confirm results or test
       additional genes in both research and commercial applications. Further,
       a method for virus extraction, purification, and solid phase
       amplification from large volume plasma specimens is described.
```

```
L13 ANSWER 3 OF 11 USPATFULL on STN
ΑN
      2004:31128 USPATFULL
Τŀ
      Methods and compositions for aptamers against anthrax
       Vivekananda, Jeevalatha, San Antonio, TX, UNITED STATES
TN
       Kiel, Johnathan L., Universal, TX, UNITED STATES
PΙ
       US 2004023266
                          A1
                               20040205
      US 2003-387314
ΑI
                          Α1
                               20030311 (10)
       Division of Ser. No. US 2001-978753, filed on 15 Oct 2001, GRANTED, Pat.
RLI
      No. US 6569630 Continuation-in-part of Ser. No. US 2001-909492, filed on
       19 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2000-608706,
       filed on 30 Jun 2000, GRANTED, Pat. No. US 6303316
       US 1999-142301P
                           19990702 (60)
PRAI
      US 2000-199620P
                           20000425 (60)
      US 2001-291371P
                           20010515 (60)
DT
      Utility
FS
      APPLICATION
       Blakely Sokoloff Taylor & Zafman, Seventh Floor, 12400 Wilshire
LREP
       Boulevard, Los Angeles, CA, 90025-1030
CLMN
      Number of Claims: 17
       Exemplary Claim: 1
ECL
DRWN
       4 Drawing Page(s)
LN.CNT 2810
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention concerns methods of preparing nucleic acid ligands
AB
       against anthrax spores, compositions comprising anthrax specific nucleic
       acid ligands and methods of use of such ligands for detection and/or
       neutralization of anthrax spores.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 4 OF 11 USPATFULL on STN
AN
       2004:31127 USPATFULL
ТT
       Methods and compositions for nucleic acid ligands against Shiga toxin
       and/or Shiga-like toxin
       Vivekananda, Jeevalatha, San Antonio, TX, UNITED STATES
IN
       Kiel, Johnathan L., Universal City, TX, UNITED STATES
PΙ
       US 2004023265
                         A1
                               20040205
                               20030311 (10)
ΑI
       US 2003-386778
                         Α1
       Continuation-in-part of Ser. No. US 2001-978753, filed on 15 Oct 2001,
RLI
       GRANTED, Pat. No. US 6569630 Continuation-in-part of Ser. No. US
       2001-909492, filed on 19 Jul 2001, ABANDONED Continuation-in-part of
       Ser. No. US 2000-608706, filed on 30 Jun 2000, GRANTED, Pat. No. US
       6303316
PRAI
       US 2002-379904P
                           20020510 (60)
       US 1999-142301P
                           19990702 (60)
       US 2000-199620P
                           20000425 (60)
DT
       Utility
FS
       APPLICATION
       Blakely Sokoloff Taylor & Zafman, Seventh Floor, 12400 Wilshire
LREP
       Boulevard, Los Angeles, CA, 90025-1030
CLMN
       Number of Claims: 33
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1725
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention concerns methods of preparing nucleic acid ligands
AB
       against Shiga toxin and/or Shiga-like toxin, compositions comprising
       nucleic acid ligands that bind Shiga toxin and/or Shiga-like toxin,
       nucleic acid ligands comprising contiguous nucleotide sequences selected
       from SEQ ID NO:1 through SEQ ID NO:11 and methods of use of such ligands
       for detection and/or neutralization of Shiga toxin and/or Shiga-like
       toxin.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 11 USPATFULL on STN

AN 2003:294256 USPATFULL

TI Methods and compositions for biological sensors

```
ΙN
       Holwitt, Eric A., San Antonio, TX, UNITED STATES
      ·Kiel, Johnathan L., Universal City, TX, UNITED STATES
ΡI
       US 2003207271
                         A1
                               20031106
ΑI
       US 2001-34127
                         A1
                               20011227 (10)
RLI
       Continuation-in-part of Ser. No. US 2000-608706, filed on 30 Jun 2000,
       GRANTED, Pat. No. US 6303316
PRAI
       US 2000-258518P
                         20001228 (60)
DT
       Utility
FS
       APPLICATION
LREP
       Blakely, Sokoloff, Taylor & Zafman, Seventh Floor, 12400 Wilshire
       Boulevard, Los Angeles, CA, 90025-1030
CLMN
       Number of Claims: 22
ECL
       Exemplary Claim: 1
DRWN
       7 Drawing Page(s)
LN.CNT 2777
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention concerns compositions, apparatus and methods of
AΒ
       use of recognition complexes, comprising biological sensors operably
       linked to an organic semiconductor. Multiple recognition complexes can
       be associated into a recognition complex system. The recognition complex
       system is of use to identify analytes, to separate biological sensors
       that bind to a target analyte from those that do not, to separate
       analytes that bind to a specific biological sensor from those that do
       not, and to prepare biological sensors with a high affinity for a
       particular analyte. The recognition complex system may be attached to a
       variety of surfaces, such as a chip, a flow cell, magnetic
      beads or non-magnetic beads. The biological sensor may be used for
       screening of, for example, a phage library, combinatorial chemistry
       library, plant tissue extract or animal tissue extract for inhibitors,
       activators or binding factors of bioactive molecules.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 6 OF 11 USPATFULL on STN
AN
       2003:282735 USPATFULL
      Method, kit and apparatus for the isolation of nucleic acids
TI
IN
       Kleiber, Jorg, Penzberg, GERMANY, FEDERAL REPUBLIC OF
      Markert-Hahn, Christine, Penzberg, GERMANY, FEDERAL REPUBLIC OF
      Harttig, Herbert, Altrip, GERMANY, FEDERAL REPUBLIC OF
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ΡI US 2003199078 **A**1 20031023

ΑI US 2003-426641 A1 20030430 (10)

Continuation of Ser. No. US 2000-509750, filed on 5 Sep 2000, GRANTED, RLI Pat. No. US 6562568 A 371 of International Ser. No. WO 1998-EP6196, filed on 29 Sep 1998, UNKNOWN

PRAI DE 1997-19743518 19971001

DTUtility

FS APPLICATION

LREP PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711

CLMN Number of Claims: 43

ECL Exemplary Claim: 1

DRWN 6 Drawing Page(s)

LN.CNT 707

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns a process for preparing biological samples for the subsequent detection of an analyte. In particular, the invention relates to a process for the isolation of a nucleic acid in a sample using a suspension of magnetic glass particles. In addition, kits and apparatuses containing magnetic glass particles for sample preparation are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L13 ANSWER 7 OF 11 USPATFULL on STN
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AN 2003:276682 USPATFULL

TIReversible association of nucleic acid with a carboxylated

Carey, Indira, Silver Spring, MD, UNITED STATES IN Heiland, Teri, New Market, MD, UNITED STATES

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Ray, Jill, Rockville, MD, UNITED STATES
       Capitol Genomix, Inc. (U.S. corporation)
PA
ΡI
       US 2003194707
                          A1
                               20031016
ΑI
       US 2002-114929
                          Α1
                               20020403 (10)
DT
       Utility
FS
       APPLICATION
LREP
       VINSON & ELKINS, L.L.P., 1001 FANNIN STREET, 2300 FIRST CITY TOWER,
       HOUSTON, TX, 77002-6760
CLMN
       Number of Claims: 48
ECL
       Exemplary Claim: 1
       11 Drawing Page(s)
DRWN
LN.CNT 1417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention is directed to methods and compositions wherein
       nucleic acids are associated with a solid phase that comprises a
       carboxylated substrate. In specific embodiments, precipitation
       of the nucleic acids occurs in the absence of salt.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 8 OF 11 USPATFULL on STN
       2003:142930 USPATFULL
AN
TI
       Methods and compositions for aptamers against anthrax
       Vivekananda, Jeevalatha, San Antonio, TX, United States
IN
       Kiel, Johnathan L., Universal City, TX, United States
PA
       Conceptual MindWorks, Inc., San Antonio, TX, United States (U.S.
       corporation)
       US 6569630
PΤ
                          B1
                               20030527
ΑI
       US 2001-978753
                               20011015 (9)
RLI
       Continuation-in-part of Ser. No. US 2001-909492, filed on 19 Jul 2001,
       now abandoned Continuation-in-part of Ser. No. US 2000-608706, filed on
       30 Jun 2000, now patented, Pat. No. US 6303316
PRAI
       US 2001-291371P
                           20010515 (60)
       US 2000-199620P
                           20000425 (60)
       US 1999-142301P
                           19990702 (60)
DT
       Utility
FS
       GRANTED
EXNAM
       Primary Examiner: Zitomer, Stephanie W.
LREP
       Nakashima, Richard A., Blakely, Sokoloff, Taylor & Zafman
CLMN
       Number of Claims: 13
ECL
       Exemplary Claim: 1
       6 Drawing Figure(s); 5 Drawing Page(s)
DRWN
LN.CNT 2700
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention concerns methods of preparing nucleic acid ligands
       against anthrax spores, compositions comprising anthrax specific nucleic
       acid ligands and methods of use of such ligands for detection and/or
       neutralization of anthrax spores.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 9 OF 11 USPATFULL on STN
AN
       2003:129793 USPATFULL
       Method, kit and apparatus comprising magnetic glass particles for the
TT
       isolation of biomolecules
IN
       Kleiber, Jorg, Penzberg, GERMANY, FEDERAL REPUBLIC OF
       Markert-Hahn, Christine, Penzberg, GERMANY, FEDERAL REPUBLIC OF
       Harttig, Herbert, Altrip, GERMANY, FEDERAL REPUBLIC OF
PΑ
       Roche Diagnostics GmbH, Mannheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S.
       corporation)
PΤ
       US 6562568
                          B1
                               20030513
       WO 9916781 19990408
AΙ
       US 2000-509750
                               20000905 (9)
       WO 1998-EP6196
                               19980929
PRAI
       DE 1997-19743518
                           19971001
DT
       Utility
FS
       GRANTED
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Smith, Anna, Gaithersburg, MD, UNITED STATES

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CLMN
       Number of Claims: 27
ECL
       Exemplary Claim: 1
DRWN
       6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 637
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention concerns a process for preparing biological samples for
ΑB
       the subsequent detection of an analyte. In particular, the invention
       relates to a process for the isolation of a nucleic acid in a sample
       using a suspension of magnetic glass particles. In addition, kits and
       apparatuses containing magnetic glass particles for sample preparation
       are provided.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 10 OF 11 USPATFULL on STN
       2002:243056 USPATFULL
ΑN
ΤI
       Nucleic acid archiving
IN
       Gerdes, John C., Denver, CO, UNITED STATES
       Marmaro, Jeffery M., Aurora, CO, UNITED STATES
       Ives, Jeffrey T., Arvada, CO, UNITED STATES
       Roehl, Christopher A., Tampa, FL, UNITED STATES
PΙ
       US 2002132242
                       A1
                               20020919
ΑI
       US 2001-944604
                         A1
                               20010831 (9)
       Continuation-in-part of Ser. No. US 1998-61757, filed on 16 Apr 1998,
RLI
       GRANTED, Pat. No. US 6291166
                         19970416 (60)
PRAI
       US 1997-41999P
DT
       Utility
FS
       APPLICATION
LREP
       HOGAN & HARTSON LLP, ONE TABOR CENTER, SUITE 1500, 1200 SEVENTEENTH ST,
       DENVER, CO, 80202
CLMN
       Number of Claims: 142
ECL
       Exemplary Claim: 1
DRWN
       21 Drawing Page(s)
LN.CNT 2097
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention is directed to a process for tightly binding nucleic acid
       to solid phase and corresponding processes for the utilization thereof.
       Nucleic acid is bound to solid phase matrices exhibiting sufficient
       hydrophilicity and electropositivity to tightly bind the nucleic acids
       from a sample. These processes include nucleic acid (double or single
       stranded DNA and RNA) capture from high volume and/or low concentration
       specimens, buffer changes, washes, and volume reductions, and enable the
       interface of solid phase bound nucleic acid with enzyme, hybridization
       or amplification strategies. The tightly bound nucleic acid
       may be used, for example, in repeated analyses to confirm results or
       test additional genes in both research and commercial applications.
       Further, a method is described for virus extraction, purification, and
       solid phase amplification from large volume plasma specimens.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 11 OF 11 USPATFULL on STN
AN
       2001:178820 USPATFULL
TI
       Organic semiconductor recognition complex and system
       Kiel, Johnathan L., Universal City, TX, United States
TN
       Bruno, John G., San Antonio, TX, United States
       Parker, Jill E., Floresville, TX, United States
       Alls, John L., San Antonio, TX, United States
       Batishko, Charles R., Richland, WA, United States
       Holwitt, Eric A., San Antonio, TX, United States
PA
       Conceptual Mind Works, Inc., San Antonio, TX, United States (U.S.
       corporation)
PΙ
      US 6303316
                          B1
                               20011016
AΙ
      US 2000-608706
                               20000630 (9)
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Primary Examiner: Siew, Jeffrey

LREP

PRAI

US 1999-142301P

US 2000-199620P

19990702 (60) 20000425 (60)

'Doyle, Charles M., Jen, George C., Pennie & Edmonds LLP

DT Utility FS GRANTED

EXNAM Primary Examiner: Horlick, Kenneth R. LREP Blakely, Sokoloff, Taylor & Zafman

CLMN Number of Claims: 62 ECL Exemplary Claim: 1

DRWN 31 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 3322

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

In a recognition complex system, nucleic acid ligands comprising random DNA sequences are operatively coupled to an organic semiconductor and distributed so as to form an array of recognition complexes. When an unknown chemical or biological analyte is applied to the array, the electrical and/or photochemical properties of one or more of the recognition complexes are altered upon binding of the nucleic acid ligand to the analyte. The degree to which the electrical and/or photochemical properties change is a function of the affinity of the nucleic acid ligand sequence for the analyte. The electrical and photochemical changes associated with the array, as a whole, can be used as a unique signature to identify the analyte. In certain embodiments, an iterative process of selection and amplification of nucleic acid ligands that bind to the analyte can be used to generate a new array with greater affinity and specificity for a target analyte, or to produce one or more nucleic acid ligands with high binding affinity for an analyte. The present invention also provides methods for preparing nucleic acid ligands that bind with high affinity to an analyte and using such nucleic acid ligands to neutralize the analyte.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.